COOP CK09-2007-09 BUSES FOR TRADE AND COOP

September 25, 2007

NAME OF BIDDER	AMERICAN BUS AND COACH, LLC
ADDRESS	2595 EAST STATE STREET
CITY, STATE, ZIP	TRENTON, NJ 08619
CONTACT	RICHARD CIRUCCI
WEBSITE OR E-MAIL	RCM1282@MSN.COM
TELEPHONE	609-689-2500
FAX	609-689-1265
EXTEND TO PURCHASING SYSTEM	YES
COST PER BUS	57,859.00
CONTRACT TERM	12/20/07-12/19/09
RESOLUTION NUMBER	2007-683
SERVICE FACILITY LOCATION	SAME ADDRESS

COUNTY OF MERCER REQUEST BID
2008 OR NEWER, FORD F450 OR EQUAL ADULT SHUTTLE BUS APPROXIMATELY FIFTEEN (15) WITH TWO (2) WHEEL CHAIR POSITIONS FOR A PERIOD OF TWO (2) YEARS OPEN END CONTRACT

Bid-Specifications

1.0 Scope

1.1 Bidder shall fully comply with specifications and the products they furnish shall be of first class quality and workmanship shall be the best obtainable in various trades. The design of the body, chassis and equipment that the bidder proposes to furnish shall be such as to produce a vehicle of substantial and durable construction in all respects. In the case of exceptions, the bidder must attach a separate sheet on which they reference each paragraph number from which they deviate, and fully explain the nature of the differences.

1.2 All structural differences must be noted. The terms "No Structural Differences", "We Are Equal To The Proposed Specifications" or "Minor Manufacturing Differences" will not be permitted. The bidder is required to provide detailed specifications at the time of the bid so that the necessary comparisons can be made to ensure compliance with this bid.

1.3 These specifications are for the current model year vehicle meeting all applicable Federal, State and ADA requirements

1.4 Failure to comply with these requirements may render the bid invalid for material non-compliance to published specifications.

2.0 **Body**

2.1 Capacity & Floor Plan

2.1.1 15 ambulatory passengers with 2 mobility device positions and 2 forward facing 2-passenger flip seats.

2.1.2 There shall be three double seats on the street side wall and four double seats on the curb side wall with two foldaway seats behind the driver on the street side.

2.1.3 The center aisle width shall be 18" minimum. **No Exceptions**
Provide Width:_____

2.1.4 The hip-to-knee room between seat rows shall be 31" minimum

2.1.5 Provide a floor plan for the exact configuration of seating.

2.2 General Dimensions

2.2.1 Exterior: Length 310” maximum
Provide Length: _____
Width 96” maximum
Provide Width: _____
Height 115” maximum

2.2.2. Interior: Width 93” minimum at floor level
Provide Width: _____
Height 80” minimum
Provide Height: _____

2.3 Body Construction

2.3.1 Vehicle shall fully satisfy all Federal Motor Vehicle Safety Standards that apply.

2.3.1 Substructure member shall be steel tubing and shall be an all Welded unitized construction. **No Exceptions.**

2.3.2 Body shall be bolted to chassis frame and shall be mounted on rubber grommets to eliminate squeaks and soften ride. Welding of any body understructure to the chassis frame will not be permitted. **No Exceptions.**

2.3.3 The vehicle body must incorporate a full jig-welded steel body framing for floor, front, rear, sidewalls, and roof. Before and after assembling, all steel body parts shall be given a thorough multiple stage anti-corrosion treatment. Two-stage epoxy primer paint shall be applied to all steel.

2.3.4 Body panels to be 0.60 aluminum seamed, at window line for ease of repair. Exterior roof panel shall be one piece FRP. A drip rail shall run full length of vehicle on each side where roof panel joins side panels. All panels shall be installed so that they will shed water, that is, the leading panel shall be lapped over the following panel and in no case shall the sealing of the panels be dependent on caulking alone.
No Exceptions

2.3.5 Fiberglass shall be used in the construction of the front and rear body caps. Steel or aluminum do not meet the body cap requirement and are not acceptable.

2.3.6 Wheel wells shall be constructed of 16 gauge steel minimum.

2.3.7 The roof structural support members shall be the equivalent of 16-Gauge hot rolled steel hat section roof bows, 1 ½" high x 3-3/8" wide, with an 18-Gauge hot rolled steel reinforcing cap plate attached to the open side of each bow. The roof structure and polystyrene core shall be bonded to all interior and exterior substrates and finish panels over the entire panel surface, thereby creating an integral structured roof panel.

2.3.8 The entire floor assembly shall be a jig-welded steel structure, equivalent of the following: Lateral G-Channel Crossbeam: shall be 2" x 4-3/16 14-Gauge cold rolled steel, reinforced at each mounting point. Longitudinal support members shall be tubing 1- ½" x 3" 16-Gauge hot rolled steel.

2.4 Exterior Finish

2.4.1 Shall be a minimum 0.60 gauge aluminum. **No Exceptions**

2.4.2 Finished surfaces shall be impervious to diesel fuel and commercial cleaning agents. Solid base color of bright white.

2.4.3 The complete undercarriage to be fully undercoated with a non-flammable, resin type material, polyoleum or equivalent, applied at the time of the manufacture.

2.4.4 The exterior of all wheels shall be painted white.

2.4.5 Mud flaps shall be installed behind the front and rear tires.

2.5 Bumpers

2.5.1 The front bumper shall be provided by the chassis manufacturer.

2.5.2 The rear bumper shall be constructed from heavy gauge, channeled steel. The bumper shall be fully braced to the chassis frame and be of wrap-around style. Must include an anti-ride plate above the rear bumper.

2.6 Driver Door

2.6.1 Vehicle shall have a driver door on the left side with a full roll up window.

2.7 Passenger Door

2.7.1 The right front passenger door shall have a minimum clear opening width from side to side of 32" and a minimum height of 80" measured from the top of the first step to door header. Plexiglass or AS2 rated glass shall be used in the full length of each door to maximize driver visibility. The finished door will provide a clear opening that is equal in width throughout its entire height. Ground height to first step shall be approximately ten (10) inches.

2.7.2 Entrance door will be double-opening, split entrance type, with full length, upper and lower. Tinted, tempered safety glass securely affixed to a 1" x 1" 18 gauge steel tube frame. Each leaf shall pivot with a steel bearing at the top and a brass bushing at the bottom.

2.7.3 Entrance door mechanism shall be electrically operated. **No Exceptions**

2.7.4 Entrance door shall be equipped with an interior, safety release mechanism. This mechanism will permit the door to open manually in the case of an emergency.

2.7.5 Entry Handrails shall be provided, one on each side of the passenger entrance door.

2.7.6 A vertical stanchion and padded modesty panel shall be provided behind the step well and a stanchion and cross bar behind the driver's seat. A 3/8" smoked Plexiglas shield must be provided behind the driver, extending from the ceiling to the top of the modesty panel and shall comply with NJ Department of Transportation regulations.

2.7.7 The passenger stepwell shall include a surface of non-skid rubber material.

2.8 Windows

2.8.1 Passenger side windows shall be at least 36” wide and 36” high with 30% light transmission. Glass shall be AS2 rated tempered safety glass. Ventilating type top T-sliders shall be provided.

2.8.2 Two emergency egress windows shall be provided on each side of the vehicle in accordance with FMVSS standards. Red lights shall be provided above each egress window and shall illuminate when the ignition switch is in the on or accessory position.

2.8.3 Driver visibility window shall be supplied directly forward of the passenger entry door to provide maximum visibility of oncoming traffic.

2.8.4 Rear windows shall be provided on each side of the emergency door.

2.9 Electrical

2.9.1 All bus circuits must be supplied by wiring, which is separate and distinct from chassis wiring. All wiring shall be color and number coded every 2” along entire length. All wiring must be contained in flex-guard loom, supported by rubber-coated galvanized clamps and run in protected locations.

2.9.2 All power to body circuits shall be distributed from a power distribution panel located behind a hinged panel above the driver’s area.

2.9.3 All circuits shall be protected by manual reset circuit breakers. Circuit breakers shall be numbered and sized to provide proper overload protection for each individual circuit.

2.9.4 Power to the distribution panel shall be supplied from the ignition solenoid via a #2 gauge cable.

2.9.5 Power to all body circuits shall be provided through a 200 amp continuous duty ignition activated solenoid.

2.9.6 All controls necessary for safe operation of the bus including door controls, courtesy lights, and air conditioning, will be located within convenient reach of the driver. (No controls are to be placed on the engine compartment cover). Engine access panel will have no mountings of lights, wires, switches or any other devices mounted to it.

2.9.7 Master wiring schematics shall be supplied in DVD or book form.

2.9.8 Spare emergency electrical fuses shall be supplied.

2.10 Exterior Lighting

2.10.1 Head lamps and front turn signals shall be supplied by the chassis manufacturer.

2.10.2 Clearance lights at top of vehicle shall meet all Federal and State requirements and shall be of LED type.

2.10.3 Brake lights at each rear corner shall illuminate when brake pedal is applied. Rear turn and backup lighting shall satisfy all federal and state requirements. All rear lights must be LED.

2.10.4 LED Back-up lights shall be a minimum 31-candle power, activated as the vehicle transmission is placed in reverse, and shall also include an audible alarm.

2.10.5 A flush mounted light shall be provided behind the passenger door as required by ADA, which automatically activates with opening of the passenger door.

2.10.6 Center mounted LED rear brake light shall be provided.

2.11 Interior Lighting

2.11.1 Dome lights shall be installed in the passenger's compartment, controlled by a master switch in the driver's console and automatically activated with the opening of the passenger door or the wheelchair lift door.

2.11.2 A minimum of two stepwell lights shall be provided in the stepwell, which automatically activates with the opening of the entry door.

2.11.3 A driver dome light shall be provided in the cab area.

2.11.4 An ADA compliant lightening system shall be located at the lift door to illuminate when the lift doors are open.

2.12 Interior Finish

2.12.1 Interior of body including roof and sidewalls shall be well insulated against heat, cold and operating noise using a minimum 1.0" fire retardant thick thermal-bonded polyester fiber in headlining, side and rear walls.

2.12.2 Maximum internal noise level will be 83 DBA under normal operating conditions.

2.12.3 Interior panels will be supported and fasten so as to prevent buckles, drumming or flexing while the vehicle is in service.

2.12.4 All interior materials shall be flame retardant and easily cleaned.

2.12.5 Floor covering will be laid without gaps or openings between sheets. Floor covering shall be R.C. A. transit floor or equal. A ribbed aisle shall be provided. White standee line and step nosing shall be provided.

2.12.6 All applicable signage as required to comply with ADA shall be provided.

2.13 Seats

2.13.1 Passenger seats shall be mid-high back featherweight bucket seats. Seats shall be covered in vinyl. Seat anchorage shall comply with FMVSS requirements. Seats shall be a minimum of 37" from the floor to the seat back top and 17.5" wide per passenger. Seat frame must include bottom cushion springs. Black padded grab handles mount on top of seat backs.

2.13.2 All passenger seats shall have retracting seat belts.

2.13.3 Each aisle seat shall have a folding arm rest with black molded rubber covering.

2.13.4 Driver's seat shall be high back, with lumbar support and right side armrest.

2.13.5 Two (2) forward facing flip seats shall be installed behind the driver at the forward wheelchair positions. The flip seats shall include passenger restraint

2.14 Heating and Air Conditioning

2.14.1 Chassis manufacturer's standard hot water type front heater to be provided on this vehicle.

2.14.2 A rear heater with a minimum rating of 65,000 BTU shall be provided.

2.14.3 OEM factory installed dash air conditioning by the chassis manufacturer shall be provided.

2.14.4 Rear air conditioning shall operate independently of the front chassis supplied system. The system shall consist of a rear ceiling mounted evaporator, a skirt mounted three fan condenser, integrated with a dual engine mounted compressors. Minimum rating of 67,000 BTU shall be required.

2.15 Mirrors

2.15.1 Combination flat and convex exterior mirrors shall on both sides of the vehicle. Each combination consist of a flat 9.5" x 7" mirror and a convex 7" x 4" mirror.

2.15.2 Interior mirror shall be day/night type conforming to FMVSS standards. Mirror shall be made of safety glass, having rounded corners and protective edges.

2.15.3 A 6" x 16" passenger mirror or an 8" convex mirror shall be provided immediately above the driver's seat for viewing the passenger seating area.

2.16 Safety equipment

2.16.1 A set of three warning triangles shall be provided in a weather resistant storage container.

2.16.2 A fire extinguisher with gauge, rated at 1A:10BC shall be secured in the driver's area.

2.16.3 A 15 unit first aid kit shall be installed on the vehicle.

2.16.4 The bus shall have an audible alarm which operates when the transmission is place in reversed.

2.16.5 A ventilation/escape hatch shall be provided in the roof of the vehicle.

2.16.6 Drive shaft guards shall be provided for each section of the drive shaft.

2.16.7 A heat shield shall be installed over the exhaust pipe and muffler to prevent the exchange of heat from the tail pipe to the fuel tank.

2.16.8 The vehicle shall be supplied with two safety belt cutters. One is to be mounted in the driver's area and the other is to be mounted above the rear door.

2.16.9 Overhead grab rail shall be installed in the ceiling and must run the full length of the bus. The grab rail shall not decrease the height of the aisle area less than 76 inches.

2.16.10 One body fluid spill kit shall be supplied and mounted.

2.16.11 Contrast. All step edges, thresholds and the boarding edge ramps or lift platforms shall have a band of color(s) running the full width of the step or edge which contrasts from the step tread and riser, or lift or ramp surface, either light-on-dark or dark-on-light.

2.16 Emergency Exit

2.17.1 A rear emergency door shall be provided with both upper and lower windows. The emergency door shall have a clear opening of 36" x 58".

2.17.2 Rear emergency door must have a door ajar audible buzzer.

2.17.3 Rear emergency door must be able to be opened by vehicle occupants from inside by following posted instructions.

2.17.4 Windows on each side of the rear emergency door shall be supplied.

3 **Chassis**

3.1 Wheelbase: 176 inches

3.2 GVWR: 14,050 lbs.

3.3 Engine: 6.0 liter-Diesel

3.4 Transmission: Automatic, 4 speed with overdrive

3.5 Electrical

3.5.1 Alternator shall be a 200 amp Penntex alternator or equal

3.5.2 The vehicle shall be equipped with dual batteries with a cold cranking capacity of not less than 1050 amps. The 1st battery shall be mounted in the engine compartment and 2nd battery should be mounted on a slide out tray behind the passenger entrance door.

3.6 Brakes:

Power assisted, heavy duty front and rear

3.7 Axles:

3.7.1 Front: 4,600 lbs

3.7.2 Rear: 9,450 lbs

3.8 Fuel tank: 55 gallons

3.9 Steering

3.9.1 Power Steering: Full Time

3.9.2 Tilt steering wheel

3.10 Exhaust must exit rear on vehicle

3.11 Miscellaneous

3.11.1 Radio: AM/FM/CD/CLOCK with four speakers

3.11.2 Rear Tow Hooks

3.11.3 Driver Side Sun-visor

4 Warranty

4.3 Body

4.1.1 Basic: 24 months

4.4 Chassis

4.2.1 Basic: 36 month/36,000 miles

4.2.2 Engine: 36 month/36,000 miles

5. MOBILITY EQUIPMENT

5.1 Wheelchair doors shall be located on the curb side, behind the passenger entrance door. The doors shall be two panel swing-out type, providing a clear opening of at least 44" wide and 71" tall. Windows shall be provided in the top half of each door panel. The door must have a socket/plunger hold open devises to hold the doors in the open position. Interior and flush mounted exterior lights, activated by opening the door, shall be provided to illuminate the lift area. A 2" red warning light shall be provided in the driver's area to warn if the door is ajar.

5.2 A fully automatic hydraulic wheelchair lift shall be provided meeting all federal, state and ADA requirements. The lift shall be a RICON model (No Exceptions), of a solid, non-folding platform type. The lift platform shall have a minimum area of 32" by 56". The lift shall include two hand rails, one on each side of the platform and no overhead crossbar. The lift shall have a manual back up system to operate the lift in the event of a power failure. A device shall be installed to prevent operation of the lift until the doors are open.

5.3 Two forward facing tie-down systems shall be provided. The systems shall include adjustable and retractable lap/shoulder combo. The belts shall attach to series “L” track recessed flush into the floor. A fixed, cover container shall be provided to store the floor belts when not in use. Surelok Kit FF627S-4C L-Series

5.4 The vehicle shall have a lift interlock which requires the transmission to be in park and the emergency brake to be applied in order to operate the wheelchair lift to ensure that the vehicle cannot be moved when the lift is not stowed and so the lift cannot be deployed unless the interlocks or systems are engaged.. The lift interlock should be of the type installed by the bus manufacturer. The lift interlock shall also have an interlock for the lift restraint safety belt so the lift cannot be deployed without safety controls in place. A dash mounted indicator light will illuminate when the system is activated.

5.5 All interior and exterior signs required by ADA shall be provided.

6 Submissions Required

6.1 Floor plan

6.2 FMVSS compliance certification

6.3 New Jersey dealers license as per New Jersey Permanent Statute 30:10-19

Miscellaneous

Bidders shall have a full parts and service facility within a reasonable distance from the County facility. State location and distance.

Acceptance of vehicle shall be subjected to the inspection and approval of the County of Mercer.

The bidders shall provide all operators, parts and service manuals.

Equipment shall be warranted against manufacturing defects for not less than (2) years from the date of delivery.

Training for operations and mechanics shall be provided by the vendor, including the use of the lift.

The vendor will pickup vehicle for all warranty work. The vendor will return the vehicle after repairs are completed for inspection at the Motor Pool.

Vehicle will be licensed to the County of Mercer with registration and tags included. The title will state **"County of Mercer."**

Supply spare tire for each vehicle.

Vehicle shall be delivered with Certified Diesel Emissions Inspections Sticker, State of New Jersey.

Vehicle shall be delivered titled to Mercer County.

PLEASE SUBMIT IN WRITING ANY EXCEPTIONS TO THE ABOVE SPECIFICATIONS.